A Service of Great Lakes Energy

September 2013

DUNTRY INES

Recycling with Rhonda

2 Rate Changes Take Effect 7 Attend A Free Energy Seminar!

Board Of Directors Election Results

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YOUR CO-OP

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On the Cover

Rhonda Oyer is her name and recycling is her game—as a unit chief for the Michigan Department of Environmental Quality, that is. She's big on recycling at home, too, and her aim is to encourage everyone in Michigan to do the same.

Photo – Robert Bruce Photography/robertbrucephotography.com





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Rate Changes Now In Effect

ffective Sept. 1, rate restructuring changes went into effect for all residential, seasonal and single-phase general service accounts. A summary and billing examples appear on page 3.

On March 22, 2013, the Great Lakes Energy board of directors held a member meeting and an independent rate consultant gave a presentation on the rate changes. Questions and comments from GLE members in attendance were heard before the board voted unanimously to approve the changes. The board also received member comments in email messages, letters and phone calls.

Here are some important points to remember about these changes:

Rate restructuring is not a rate increase because not all members will see higher bills. Many will have lower bills. It shifts the fixed costs billed in the energy (kWh) charge to the monthly charge so each member pays for the fixed costs to serve them regardless of energy usage. It is revenue neutral, which means Great Lakes Energy does not collect any more or less revenue with these changes.

Rate restructuring is not unique to Great Lakes Energy. Other electric cooperatives have the same obligation to run their member-owned business in a financially responsible way with each member covering the actual costs to serve them. At least 18 other electric co-ops in neighboring states already have similar monthly charges of \$30 or more.

The energy charge and the Power Supply Cost Recovery (PSCR) charge will decrease and the fixed monthly charge will increase to more accurately reflect the actual cost to serve each member in the affected rate classes. The fixed monthly charge covers the costs of providing the minimum set of equipment (meter, transformer, poles, wire, etc.) necessary for a member to access the electric grid plus related reliability upgrades (tree trimming, new technologies, power line protection devices). The cost of providing a minimum system for each member is the same regardless of the member's usage. By charging rates that accurately reflect costs, members will only have to pay for what they

Find us on Facebook. facebook.com/greatlakesenergy are actually using; namely the minimum system plus as much size-related equipment as the member requires.

Members who work to lower their energy use will still save energy and money with the new rates. For example, someone enrolled in our full Controlled Heating (CH) program with a qualifying geothermal or air-source heat pump will see their electric heating rate drop from 6.653 to 5.64 cents per kWh. Recovering the fixed costs of the minimum system in the fixed monthly charge rather than in the energy usage charge means GLE members can reduce their kilowatt-hour use without negatively impacting recovery of the revenue needed to provide each member with the minimum system to access the electric grid.

Much of what you pay still comes back to benefit you in more reliable electric service. For six of the last seven years, we met our annual reliability goal by working to reduce average outage minutes (see related story on p. 6). Rate restructuring provides a more stable source of revenue that will help us better meet our future reliability improvement goals.

Big commercial and industrial users are not single-phase general service accounts and are not affected by the residential rate changes. Single-phase general service accounts include pole barns and garages without a residence on-site, billboards, apartment buildings, church rectories, campgrounds and other uses that are neither a large business nor a typical residence.

Low-income families and senior citizens who tend to use more energy will benefit by the reduced kWh rate. Our data shows the average monthly kWh consumption for lowincome members and seniors on the Michigan Winter Protection Plan is 50 percent higher than others in their same rate class. In addition, a recent analysis of members receiving assistance from the Department of Human Services shows that 61 percent have much higher than normal monthly kWh consumption.

We've been asked what our motivation behind this rate restructuring is. The answer is simple. We are a not-for-profit cooperative and our rates are based on actual costs. Members should pay what it actually costs us to serve them. It's part of the cooperative way of doing business.



Quick summary of the rate restructuring changes:

- Members in the affected rate classes (residential, seasonal, single-phase general service) will be billed a decreased energy charge of \$0.08640 per kWh and a fixed monthly charge of \$32.21 per month.
- Members with additional meters using the same transformer as the main meter will be billed a reduced monthly charge of \$9.94 per month for each additional meter and \$0.08640 per kWh for energy. Additional meters do not include electric heat meters, which do not have a monthly charge.
- The Power Supply Cost Recovery (PSCR) factor will be lowered to \$0.01415 per kWh for these rate classes, which is less than the approved PSCR ceiling amount.
- All quarterly billed accounts will convert to monthly billing.
- In addition, the Beaver Island monthly surcharge was eliminated.

For more information, or to use the rate change calculator, visit gtlakes.com.

Stay Connected With Your Co-op!

hen Great Lakes Energy has important information to share with you, that message can only reach you if you stay connected with your electric cooperative.

Here are a few good reasons why you need to make sure we have the correct phone number and address for the location where you receive our service:

• Emergencies can happen. Last spring, some GLE families in a small area in Newaygo County were evacuated from their homes due to flooding. We were asked by local emergency operations workers to shut off their power. Our communications with members was critical to getting their power restored as quickly and safely as possible once the flooding subsided.

• If you have questions or concerns about tree re-clearing work scheduled near power lines by your home, we want to hear them before crews start work. Advance notification by mail and phone is used to reach you.

• After an outage, we will phone you to make sure your power is back. Or we may need to phone you if planned power line work is to be done in your area that will require the power to be off temporarily.

• The automated outage reporting system (800-678-0411) will handle your outage call faster if we have the correct phone number for your service location. It identifies your phone number and gives us your outage location.

Take a minute and give us your updated contact information so we can stay connected and better serve you! You can either call us, fill out the back of your electric bill and return it, or update that information online by visiting gtlakes.com.

Billing Examples with	I New Rates Elle	cuve 9	-1-13					
RES/SEA/CSP Rates	250 kWh		500 kWh		750 kWh		1,000 kWh	
Monthly Charge - \$32.21	Monthly Charge	\$32.21	Monthy Charge	\$32.21	Monthy Charge	\$32.21	Monthy Charge	\$32.21
Energy Use - \$0.08640/kWh	Energy Use	\$21.60	Energy Use	\$43.20	Energy Use	\$64.80	Energy Use	\$86.40
PSCR - \$0.01415/kWh	PSCR	\$3.54	PSCR	\$7.08	PSCR	\$10.61	PSCR	\$14.15
EO Surchg - \$0.00198/kWh	EO Surcharge	\$.50	EO Surcharge	\$.99	EO Surcharge	\$1.49	EO Surcharge	\$1.98
State Sales Tax - 4%	State Sales Tax	\$2.31	State Sales Tax	\$3.34	State Sales Tax	\$4.36	State Sales Tax	\$5.39
TOTAL	Total	\$60.16	Total	\$86.82	Total	\$113.47	Total	\$140.13
Additional Meter(s)**	250 kWh		500 kWh		750 kWh		1,000 kWh	
Monthly Charge - \$9.94	Monthly Charge	\$9.94	Monthly Charge	\$9.94	Monthly Charge	\$9.94	Monthly Charge	\$9.94
Energy Use - \$0.08640/kWh	Energy Use	\$21.60	Energy Use	\$43.20	Energy Use	\$64.80	Energy Use	\$86.40
PSCR - \$0.01415/kWh	PSCR	\$3.54	PSCR	\$7.08	PSCR	\$10.61	PSCR	\$14.15
EO Surchg - \$0.00198/kWh	EO Surcharge	\$.50	EO Surcharge	\$.99	EO Surcharge	\$1.49	EO Surcharge	\$1.98
State Sales Tax - 4%	State Sales Tax	\$1.42	State Sales Tax	\$2.45	State Sales Tax	\$3.47	State Sales Tax	\$4.50
TOTAL	Total	\$37.00	Total	\$63.66	Total	\$90.31	Total	\$116.97

Billing Examples With New Rates Effective 9-1-13

**Additional meter served by same transformer as main meter. Excludes electric heat meters.

Billing Examples With Rates prior to 9-1-13

RES Rate	250 kWh		500 kWh		750 kWh		1,000 kWh	
Monthly Charge - \$18.28	Monthly Charge	\$18.28	Monthly Charge	\$18.28	Monthly Charge	\$18.28	Monthly Charge	\$18.28
Energy Use - \$0.09653/kWh	Energy Use	\$24.13	Energy Use	\$48.27	Energy Use	\$72.40	Energy Use	\$96.53
PSCR - \$0.02123/kWh	PSCR	\$5.31	PSCR	\$10.62	PSCR	\$15.92	PSCR	\$21.23
EO Surchg - \$0.00198/kWh	EO Surchrge	\$.50	EO Surcharge	\$.99	EO Surcharge	\$1.49	EO Surcharge	\$1.98
State Sales Tax - 4%	State Sales Tax	\$1.93	State Sales Tax	\$3.13	State Sales Tax	\$4.32	State Sales Tax	\$5.52
TOTAL	Total	\$50.15	Total	\$81.29	Total	\$112.41	Total	\$143.54
SAM/SEA Rate per Month	250 kWh		500 kWh		750 kWh		1,000 kWh	
Monthly Charge - \$18.28	Monthly Charge	\$18.28	Monthly Charge	\$18.28	Monthly Charge	\$18.28	Monthly Charge	\$18.28
Energy Use - \$0.14629/kWh	Energy Use	\$36.57	Energy Use	\$73.15	Energy Use	\$109.72	Energy Use	\$146.29
PSCR - \$0.02123/kWh	PSCR	\$5.31	PSCR	\$10.62	PSCR	\$15.92	PSCR	\$21.23
EO Surchg - \$0.00198/kWh	EO Surcharge	\$.50	EO Surcharge	\$.99	EO Surcharge	\$1.49	EO Surcharge	\$1.98
State Sales Tax - 4%	State Sales Tax	\$2.43	State Sales Tax	\$4.12	State Sales Tax	\$5.82	State Sales Tax	\$7.51
TOTAL	Total	\$63.09	Total	\$107.16	Total	\$151.23	Total	\$195.29

Letters & More

Reader letters, call to Action.coop, Mystery Photo, and more. It's all here on your Readers' Pages.



Independence

I grew up in the '50s in Buffalo New York. When I read your story about "Independence," it really made me think of the good old days. The boys would play baseball just like you said. We all looked forward to summer. Thanks for the story. – Gene Ehrhardt, Schoolcraft

I am new to *Country Lines* and always read your column, but after reading "Independence," I felt compelled to contact you.

I retired in 2012 after 30 years as an elementary/middle school educator. From my own childhood and seeing changes in children over the years, we have done them no favors by regimenting their free time.

I too grew up playing pick-up games until the street lights came on and we all had to head home. We explored and spent hours at the fishing hole or nearby woods. Through these activities, we learned to understand the world, make decisions, and negotiate difficulties.

Video: Co-ops Urge Common Sense on Climate Regulations

A micro website, called Action.coop, was just launched by the National Rural Electric Cooperative Association (NRECA) that gives a voice to the 900-plus electric co-ops and their 42 million consumer members that oppose President Obama's climate proposal. The proposal uses the Clean Air Act to regulate carbon dioxide emissions from power plants during a fragile economic recovery.

The site's two-minute video is the first action in what will be a long-term campaign to underscore the dramatic impact new regulations could have on the country's electric generation and calls on co-op members, staff and directors to join the united effort.

"Rural communities have a great story to tell about how they are innovating, using new technologies, and leading in energy efficiency. It's our responsibility to communicate the importance of affordable energy to the communities cooperatives serve and tell their story on how we are pursuing our energy future," explains Jo Ann Emerson, CEO of NRECA. "The next few months are a critical time to unite behind that message and let

As a teacher, I have seen fewer and fewer children who are independent thinkers able to solve problems. We call it "learned helplessness." As adults, we provide all the answers by structuring and supervising many aspects of our children's lives.

Most of our children no longer want to spend much time outdoors. Richard Louv's wonderful book titled, "Last Child in the Woods: Saving Our Children from Nature-Deficit Disorder" speaks volumes. How will future generations protect something they haven't learned to cherish? One of the best suggestions is from parenting advice writer John Rosemond. He says today it may not be safe for children to be completely unsupervised, but recommends that parents rotate being "available." One parent takes a book and lawn chair to the local play site. If there's an emergency, the parent is there, but otherwise doesn't intervene. The kids play, and decide by as much arguing as necessary if the pitch was a strike or Josh was out.

The ball fields behind my home are empty all summer. Oh, if we would've had these facilities as children, my mom



Visit Action.coop and join NRECA CEO Jo Ann Emerson and fellow electric co-op members in asking that climate change issues be approached sensibly and affordably.

policymakers know where we stand on the issues, as well as how important affordable energy is to us and the American economy."

The NRECA website announcement was made about the same time that Organizing for Action, a grassroots group of Obama supporters, emphasized their support for his proposed climate regulations in late August.

See the video and sign up at **Action.coop** to join the fight for adding common sense to the national climate change debate and keeping electric rates affordable.

> may have had to ring the dinner bell to get us in for the night! — Sharon Roeck

Wind Talkers

Our family thinks your [July-August] article on the "Pros and Cons of Wind Power" lacked some significant issues.

We live in the middle of Consumers Energy's Lake Winds Energy Park, which began operation last Thanksgiving, and know from firsthand experience the shadow flicker, flashing lights and noise are not trivial matters for many who end up having their piece of heaven literally



DO YOU KNOW WHERE THIS IS?

Every co-op member who identifies the correct location of the photo at left by **Oct. 10** will be entered in a drawing for a \$50 credit for electricity from their electric cooperative. *We do not accept Mystery Photo guesses by phone!* Email **mysteryphoto@ countrylines.com**; enter your guess at **countrylines.com**; or send by mail to *Country Lines Mystery Photo*, 2859 W. Jolly Rd., Okemos, 48864. Include your name, address, phone number and name of your co-op. Only those sending complete information will be entered in the drawing. The winner will be announced in the Nov./Dec. 2013 issue.

The July/August contest winner is Marc Parshall of Grand Ledge, who correctly identified the photo from E. Grand River St., Old Town, Lansing.



surrounded by industrial turbines and the lawsuits they have generated in most of the wind farms built in Michigan. Turbines may be wonders of human ingenuity, but after the novelty wears off they begin to wear on you.

– Eric Jefferies, Ludington Great Lakes Energy Co-op

Using Less Electricity

Your *Country Lines* is an interesting little magazine just read the May/June! This issue, like many others, suggests using less electricity.

Several good methods were mentioned, including low-E windows (James Dulley, "Cut Through Sales Hype Before Replacing Windows"). We had a house with those, Anderson, and not enough light came into the house—even our house plants suffered!

Another issue arises with 'saving.' In Manistique, we have saved our water use so much that the city now does not receive enough to pay for their treatment plant modification! Will our electricity work the same way so that our unit cost will be increased? – Don Hartman

Your water bill experience is not uncommon. Utilities are finding it difficult to keep rates low due to federal, state and local environmental regulations. The best way to manage rising costs is to use energy more efficiently, which helps keep energy bills low.

The energy efficiency programs you refer to are required by P.A. 295, the "Clean, Renewable and Efficient Energy Act of 2008", which requires all electric providers and investor-owned natural gas providers to implement energy efficiency programs. It's intended to avoid the cost of constructing new power plants, which cost billions of dollars and would raise electric rates. The cheapest kilowatt is the one that isn't used. For more on Energy Optimization Programs, visit michigan-energy.org or call 877-296-4319.

– Art Thayer, energy efficiency programs director, Michigan Electric Cooperative Association

Hydrothermal Energy?

In July/August, your geothermal energy article makes no mention of hydrothermal heating/cooling.

Geothermal makes use of a closed-loop system that circulates a fluid thru the furnace via a pump, which does not function if the power is out. Hydrothermal input is a water source like a river, lake or an artesian flowing well.

The first two require a pump and the output is returned to the source. An artesian flow, like mine (224' deep well), requires no pump and the output is sent into a river, lake, or other drainage system. If the power is out, the faucets and toilets still work, but the furnace does not, as there's no electricity to run the blower. – Dave Westfall, Naubinway

There are three types of geothermal loops: open, closed earth, and closed pond, but not all are suited for Michigan (visit earthcomfort.com, dulley.com, or search Wikipedia.com).

An artesian well system is more efficient because it eliminates pumping costs, but few people have one. Hydrothermal resources need heat over 300 degrees F to generate electricity, and there are some lower heat uses, but it's uncertain yet how Michigan fits in. A Statewide Geothermal Data Project is being conducted at WMU, but early data shows we may not have the right temperatures. Ideal locations are currently in California, Oregon, Nevada, Idaho and Wyoming. Visit www1.eere.energy.gov/ geothermal to learn more about hydrothermal technologies. - Art Thayer, MECA



Co-op Employees Experience Challenges of Rural India

ichigan Country Lines found its way to India this summer. Ashley Copeland and Scott Blecke, electrical engineers at Great Lakes Energy (Boyne City), visited in July as part of their MBA studies. They're shown above with a copy of the magazine in front of Mysore Palace, about three hours from the city of Bangalore. Their trip was part of a management course designed to teach the challenges and advantages global companies face in interacting with and developing products for a nation like India.

"It was a very humbling experience," Scott says. They discovered that India's electrical distribution systems only vaguely resemble those in America. Live wires and equipment hangs so low that people can easily touch them, and no regulations govern such unsafe situations. The government owns the Bangalore electric system. "Something like that would never be okay in the United States, and yet over there everyone just knows that you don't go touching the lines, and if you do, it's your own fault," Scott says. In the United States, utilities are expected to take responsibility for the public's safety.

"It's amazing," Ashley says, the efforts some companies are making, however, to help India's rural areas. They visited a village where a company called SELCO installed affordable solar panels to charge batteries for portable lights that children use at night. The solar units average about \$150 and residents can take five years to pay for them.

Both employees said they appreciate their U.S lifestyle more fully after witnessing rural life in India.

– Linda Kotzian

Good 2nd Quarter For Reliability

AIDI (pronounced SAY-DEE) says Great Lakes Energy finished the second quarter of 2013 with fewer average outage minutes than last year.

On July 1, 2013, average outage minutes

totaled 58.48 compared to 71.38 minutes reported on the same date a year ago. We remain on track to reach our 2013 reliability goal, which is to not exceed 167 average outage minutes.

The goal is based on average outage minutes recorded in the previous five

years during normal conditions. Typically the outages are due to weather, animals, equipment failures, vehicle accidents and other causes.

The cooperative uses an industry standard index for determining average outage minutes. The System Average Interruption Duration Index (SAIDI) is an indicator of the average amount of time a GLE member could be without power in a given year. Since it represents an average, some members actually experience no outage times while others experience more than the SAIDI number.

Weather-related outage events are factored

into the SAIDI calculations, with the exception of major event days (MEDs). Storms that create MEDs, such as the December 2012 snowstorm, are not common and only happen once or twice a year across the co-op's

entire service area.

Great Lakes Energy will continue to take measures to limit the weather's damaging impact on its distribution system. Investments in automated equipment, additional line protection devices, the use of new technologies, and

continued intensive vegetation management activities within power line rights-of-way are all helping to get the lights on safely and more quickly for members during storms.

The co-op's ultimate goal is to not exceed 90 average outage minutes a year. It will take time to do this, given our large 26-county service area and the financial resources required. We will continue to make improvements each year in areas where reliability still lags behind other electric co-ops.

Keep reading *Michigan Country Lines* for future SAIDI goal updates.

STATE OF MICHIGAN BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

In the matter of the Commission's own motion, regarding the regulatory reviews, revisions, determinations, and/or approvals necessary for Great Lakes Energy Cooperative to fully comply with Public Act 295 of 2008.

Case No. U-17370 NOTICE OF OPPORTUNITY TO COMMENT

On March 15, 2013, April 2, 2013, and May 2, 2013, the Michigan Public Service Commission (Commission) ordered Great Lakes Energy Cooperative to file an energy optimization plan on or before August 1, 2013, to comply with the "Clean, Renewable and Efficient Energy Act" (2008 P.A. 295, MCL 460.1001, et seq.) in Case No. U-17370. On July 30, 2013, Great Lakes Energy Cooperative filed its application for an Energy Optimization Plan with the Commission.

Any interested person may review the filed Energy Optimization Plan on the MPSC website under Case No. U-17370 at: <u>michigan.gov/mpscedockets</u> and at the offices of Great Lakes Energy Cooperative, 1323 Boyne Avenue, Boyne City, Michigan or at the office of the Commission's Executive Secretary, 4300 W. Saginaw, Lansing, Michigan 48917, between the hours of 8 a.m. and 12 p.m. and 1 p.m. and 5 p.m., Monday through Friday.

Written and electronic comments may be filed with the Commission and must be received no later than 5:00 p.m. on October 6, 2013. Written comments should be sent to the: Executive Secretary, Michigan Public Service Commission, P.O. Box 30221, Lansing, Michigan 48909, with a copy mailed to Great Lakes Energy Cooperative, 1323 Boyne Avenue, Boyne City, Michigan 49712-0070. Electronic comments may be emailed to: <u>mpscedockets@michigan.gov</u>. All comments should reference Case No. U-17370. Comments received in this matter will become public information, posted on the Commission's website, and subject to disclosure. Please do not include information you wish to remain private.

The Commission will review the energy optimization plan together with any filed comments and provide a response indicating any revisions that should be made. If the Commission suggests revisions, Great Lakes Energy Cooperative will file a revised EOP plan. A Commission order will be issued following the filing of the application.

GREAT LAKES ENERGY COOPERATIVE

Fuel Mix Report

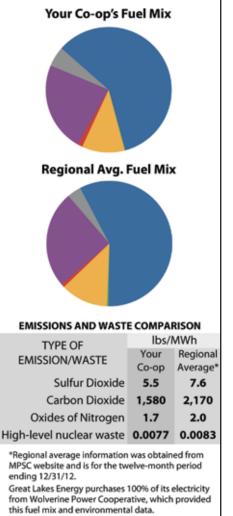
The fuel mix characteristics of Great Lakes Energy Cooperative as required by Public Act 141 of 2000 for the 12-month period ended 6/30/13.

COMPARISON OF FUEL SOURCES USED Regional average fuel mix used

Your co-op's fuel mix

FUEL SOURCE		
Coal	59.2 %	57.9 %
Oil	0.2%	0.4%
Gas	11.0%	12.2%
Hydroelectric	1.3%	0.9 %
Nuclear	23.1%	25.0 %
Renewable Fuels	5.2%	3.6%
Biofuel	0.4%	0.1%
Biomass	0.2%	0.4%
Solar	0.0%	0.0%
Solid Waste Incineration	0.2%	0.5%
Wind	4.2%	2.2%
Wood	0.2%	0.5%

NOTE: Biomass above excludes wood; solid waste incineration includes landfill gas, and wind includes a long-term renewable purchase power contract in Wolverine's mix.





Attend A Fall Energy Seminar!



wo free energy seminars for Great Lakes Energy members will be held this fall. Attend the one nearest to you. Hear presentations on geothermal and air-source heat pumps, Marathon[®] electric water heaters, and Energy Optimization (EO) programs that offer incentives to help

Co-op Connections[®] Discounts Grow

he newest business to join the Co-op Connections[®] discount program is Sam's Club.

Join or renew as a Sam's Club Plus[®] Member and receive a \$25 gift card. See the Sam's Club listing on connections.coop for details.

This and many other discounts are available through this program to Great Lakes Energy members. Take advantage of bargains online or use your Co-op Connections[®] card at participating businesses that offer savings on dining, auto repair, health care, prescriptions, hotels, gifts, car rentals, and more. Valuable offers from local and national merchants are available.

Save up to 85 percent on prescription drugs and refills at participating retailers. Other healthy savings discounts are available, too.

The best part about the Co-op Connections[®] card is it's free to GLE members. This is



a discount card, not a credit card. Don't have a card? Simply call us at 888-485-2537, ext. 8957, and start saving today.

you save energy. They include rebates for the purchase of furnaces with ECM blower motors, electric water heaters, refrigerators, lighting, and more. In addition, information on EO programs that offer free appliance recycling and online audits will be provided.

Local heating and cooling companies and



Space is limited, so please register by calling 1-888-485-2537, ext. 8958.

Great Lakes Energy staff members will be on hand to answer questions related to electric heat and electric water heaters.

Co-op members will learn about other incentive programs offered, too.

Door prizes will be awarded, and winners will receive energy-saving gifts.

all for a dollar

What can you buy for a dollar? Not much, unless you're talking about electricity.

Electricity remains a bargain today like it did over 75 years ago when early co-op members found a new helper that could reduce their workload and brighten their lives.

Despite rising energy prices, electricity is still a good buy for Great Lakes Energy members.

FOR a DOLLAR'S WORTH OF ELECTRICITY*:

- S Vacuum the carpet an hour a week for over three months.
- Listen to your favorite music on the stereo an hour a day for over two months.
- S Use your reading light two hours a night for over seven weeks.
- S Make coffee and toast each day for over three weeks.
- Use a small microwave oven an hour a day for nearly two weeks.
- S] Watch your big screen TV or run your personal computer five hours a day for over one week.

* Based on 10.253 cents/kilowatt hour (kWh), which includes EO and PSCR charges.

Harvesting Efficiency

Energy efficiency offers rich rewards for farmers.

very dairy cow carries an energy price tag. Farmers pump water—and \$2.6 billion in energy dollars—to boost crops. At the end of the day, energy, both direct and indirect, accounts for 13 percent of production expenses on an average farm, so it makes sense that more farmers are turning to energy efficiency to help their bottom lines.

Electricity powers a farm's heating (water, space, heat lamps), pumping (irrigation, water wells, manure lagoons), refrigeration, ventilation, fan (drying grains, aeration) and lighting operations. Material handling—such as feed augers, manure conveyors, milking, and egg conveyors—also drain resources.

The American Council for an Energy Efficient Economy estimates farmers could save \$88 million annually by investing in efficient motors and lighting. So, how can Michigan farmers reap efficiency benefits?

Local electric cooperatives provide rebates for agricultural members (and other business and residential members) who make electricity-saving improvements through the Energy Optimization Program (visit michigan-energy.org or call 877-296-4319; Cherryland Electric Co-op members, call Member Services at 231-486-9200 or 800-442-8616).

EnSave, a national agricultural energy efficiency firm, also provides a pyramid of steps farmers can take to cut down energy use. The

Energy Optimization Farm Rebates

• Dairy refrigeration tune-up \$150
Low-energy livestock waterer \$50
• Exhaust or circulation fan
for barn \$2 per blade inch
• Variable speed milk vacuum pump \$750
• Variable speed milk pump \$500
• Scroll compressor replacement \$250
• Milk pre-cooler \$750
 High bay fluorescent
replacing HID \$25-\$60/fixture
• LED light bulbs \$4-\$15
Compact fluorescent light bulbs \$1-\$5
Outdoor dusk-dawn lights \$20-\$50
Visit michigan-energy.org or 877-296-4319;
Cherryland Electric Co-on members call

Cherryland Electric Co-op members call 231-486-9200 or 800-442-8616.

greatest savings come from deploying more efficient equipment, but behavioral changes and a simple analysis of how energy is consumed can result in significant savings, too.

Equipped to Save

Each farm—dairy, poultry, beef, hog or crop—offers opportunities for efficiency improvements. For example:

Clean equipment: Removing dust, soot and debris will allow equipment to do more work with less effort, therefore extending its life and reducing energy use.

Inspect equipment regularly: Replace parts that show excessive wear before they break and cause irreparable damage.

Plug leaks: Be it a pinprick hole in a hose or a drafty barn, leaks waste money, fuel and electricity.

Remove clutter: Hoses should be flushed regularly to clear debris. Ensure that fan and motor intakes and exhausts remain clear for maximum circulation and efficiency.

Light Lessons

After tuning up your equipment, check the lights. Light your work areas, not entire buildings, and install dimmable ballasts to control lighting levels. Use daylight whenever possible.

The type of light used also makes a difference. While useful as a heat source in limited situations, such as keeping water pumps from freezing in winter, incandescent lightbulbs only convert 10 percent of the energy used into light. The rest is given off as heat. Consider these energy-saving options, as compared to incandescents:

• Halogen incandescents use 25 percent less energy and last three times longer than traditional incandescent bulbs;

• Compact fluorescent lightbulbs (CFLs) use 75 percent less energy and last up to 10 times longer;

• Light-emitting diodes (LEDs) use 75 to 80 percent less energy and last up to 25 times longer;

• Cold cathode fluorescent lamps (CCFLs) last up to 25 times longer and offer the same efficiency as CFLs.

• T-8 and T-5 fluorescent lights with



electronic ballasts operate more coolly, produce more light per watt, generate less noise (without flickering), and offer better color rendering and energy savings.

Harsh Surroundings

Before buying new equipment or lighting, make sure your gear can survive the farm's rough environment—fluctuating temperatures, wet locations, long operating hours, and large loads. Confirm the manufacturer's specifications that the unit is intended for the environment, and review the warranty and conditions. Make sure the way you plan to use it will not void the warranty.

Look for knowledgeable suppliers and installers familiar with the local climate and your needs. Typically, farms need more rugged devices than what's available at a low cost from a retail or big-box store.

Seeds of Change

▲ For regional or crop-specific efficiency methods, use the USDA Natural Resources Conservation Service energy calculators at energytools.sc.egov.usda.gov. Assess how much energy your farm needs for animal housing, irrigation and tillage, and discover ways to cut costs. Dairy farmers may also visit usdairy.com/saveenergy.

▲ Funding for efficiency upgrades is available through the Rural Energy for America Program (REAP). Since 2008, REAP has funded over 6,800 renewable and energy efficiency grants and loan guarantees as well as 600 farm energy audits. Get details at rurdev.usda.gov>Energy>Rural Energy for America Program.

▲ Farmers can also apply for financial and technical/energy management help from the Environmental Quality Incentives Program (nrcs.usda.gov>Programs>Financial Assistance>Environmental Quality Incentives Program).

Sources: American Council for an Energy Efficient Economy, EnSave, U.S. Natural Resources Conservation Service, Innovation Center for U.S. Dairy

LEDs Advance Farm Lighting

ne of the biggest developments in lighting our homes, businesses and streets involves the use of light emitting-diodes (LED). These lightbulbs convert electricity directly into bright, white light far more efficiently than other lighting options.

Farms pose unique challenges for lighting—excessive dirt, dust, heat, humidity and ammonia emissions impact bulb performance that conventional light sources have been unable to successfully address.

However, LEDs may offer a robust, environmentally sustainable, and potentially longer-lasting solution. Even better, since LED light can be manipulated, it may be able to improve production.

Hundreds of LED fixtures being tested at roughly 50 farms across rural America—several of which are led by electric co-ops—save on energy and maintenance costs. With a rated life of 35,000 to 50,000 hours, LEDs can last up to 25 times longer than traditional incandescent bulbs, four to eight times longer than linear fluorescent and compact fluorescent bulbs, and over twice the time of high-intensity discharge bulbs.

While LEDs are more expensive than traditional lighting, the U.S. Department of Energy reports a price drop of 54 percent over the last two years. LEDs offer farmers several attractive attributes, including:

▶ Rugged, vibration-resistant construction

► Directional lighting for less wasted light

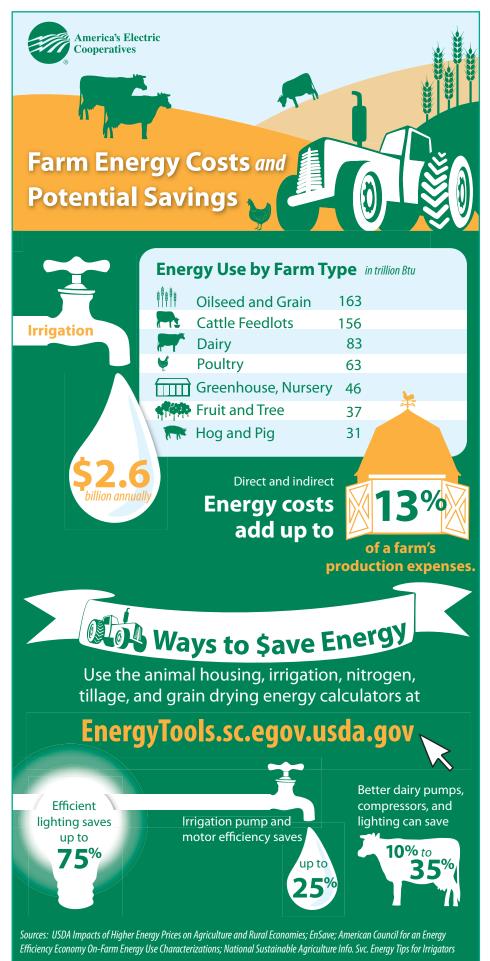
- Customizable colors
- Dimmable capabilities and integration with lighting controls
- ▶ No mercury or waste disposal costs
- ▶ Water- and ammonia-resistant bulbs can be cleaned without damage.

While assessment continues, many claims about LED farm performance are not yet backed by statistically sound science, but preliminary results imply promising and significant energy savings and hint at production boosts.

Farmers can remain cautiously optimistic that research and LED companies will be able to create lighting that is cost-effective and long-lasting.

– Brian Sloboda & Martha Carney, CRN

As the research and development arm of the National Rural Electric Cooperative Association, CRN, the Cooperative Research Network, pursues innovative solutions that help Michigan electric co-ops deliver safe, reliable and affordable power to their consumer-members.



COVER STORY | Rhonda Oyer & Gail Knudtson

TIN CANS REMOVE PAPER CLEAN FLATTEN

Recycling With Rhonda

This DEQ unit chief walks-the-walk while promoting "Recycle, Michigan."

ecycling is on Rhonda Oyer's mind every day, both at home and work. "I don't even remember when I first became involved in recycling," says the current chief of the Michigan Department of Environmental Quality's Sustainable Materials Management Unit (SMMU). "It may have been as a 'junior litter picker-upper' while camping with my family, or through a school field trip in the 5th grade when we visited the county landfill." In any case, Over has worked for the DEQ for 22 years, starting as an enforcement specialist for solid waste and scrap tires. "When I got my degree in biology, no one could have predicted I would spend my career 'talking trash!" she adds, laughing.

I E I

"But seriously, most people give very little thought to what they throw away," she explains. Recycling doesn't have to be complicated, and you don't need a fancy area to sort or store your recyclables. "You just have to want to do it and take a little time to find out what can be recycled in your area. It is the right and responsible thing to do in our society to manage our planet's shrinking resources," she says. At home, Rhonda recycles through the Charlotte Area Recycling Authority.

She has lived most of her life in rural areas that are served by electric co-ops, first

in Antrim County (Cherryland Electric Cooperative) and now in Eaton County as a member of Tri-County Electric Co-op, and notes that many rural areas have recycling opportunities that require residents to bring their materials to a drop-off location. Currently, only 24 of Michigan's 83 counties have convenient access to recycling, through either drop-off or curbside collection, for all residents in single family homes.

Generally, Rhonda drops her own recycling off once every few months, and sorts the

items in her garage, in...yep... recycled containers. "I have a big cardboard box that a shelving unit came in to stash the containers I use to sort things

in, so they are easy to take back." The containers include kitty litter buckets, a few old laundry baskets, and a fruit box for sorting cans, glass, plastic, boxboard, newspapers, magazines, junk mail and occasionally, batteries and lightbulbs. She usually puts out less than a half-bag at the curb for trash pick up. "So, if I forget to take out the trash one week, it isn't a big deal," she laughs.

A shift has occurred over the last few years in how trash is viewed, she continues, and it's called sustainable materials management (SMM). Rhonda's DEQ unit uses the SMM approach to redirect trash in the most productive and sustainable way throughout its life cycles, from extraction through recycling or final disposal. This minimizes the amount of materials involved and all the associated environmental impacts, while accounting for economic efficiency and social considerations. "This aligns with the efforts of both the United States Environmental Protection Agency to address waste issues in the SMM framework and with Michigan's 2007 Solid Waste Policy, which recognizes solid waste as a resource that should be managed to pro-

"Electronic waste (e-waste) is the fastest growing source of waste, and includes computers, TVs and cell phones."

mote economic vitality, ecological integrity, and improved quality of life in a way that fosters sustainability," she says.

Her unit is also responsible for programs that involve solid waste planning, residential recycling and composting, beneficial reuse of industrial materials, dredging, and electronic waste and scrap tire management. "We incorporate SMM concepts into our work so that the job creation, resource conservation, greenhouse gas reduction, and energy-saving benefits of viewing waste as a resource can be realized in Michigan," she explains. They also try to lead by example, as the DEQ offices have a good recycling program in place and the building is being redesigned to have a recycling area on each floor.

A couple of particular waste streams are also being focused on. "Electronic waste (e-waste) is the fastest growing source of waste, and includes computers, TVs and cell phones." E-waste contains toxic materials that pose hazards to human health and the environment if not properly disposed or recycled. "E-waste also contains valuable materials," she emphasizes, "and that's why the Environmental Protection Agency (EPA) encourages reusing and recycling over landfilling and incineration."

Organic waste is another area where there's a lot of opportunity to shift waste to sustainable uses. Yard clippings are currently banned from landfill disposal, and the DEQ has a program for registering yard waste composting sites. Food waste and the EPA's Food Recovery Challenge (source reduction, feeding people and animals, industrial uses [rendering/fuel conversion/digestion], composting, landfill) are also seeing increased interest. The DEQ's food waste efforts are focused on assessing what is currently being done here and connecting interested parties.

State leaders have also recognized the benefits of recycling, Rhonda adds. Gov. Rick Snyder has specifically mentioned forming a 2014 plan for getting Michigan up-tospeed on it and DEQ Director Dan Wyant is working with stakeholders to identify the best plan for getting all residents to recycle.

With this new focus, Oyer adds, it's clear the state needs to measure existing recycling efforts in order to identify areas for improvement and create a way to measure progress. Estimates show there is less than a 16 percent residential recycling rate. "Industrial recycling seems to be done at a much higher rate, but again there is no consistent measurement and what data we do have is submitted voluntarily," she reports. The DEQ is working to establish a measurement system, and identify which residents and businesses have access to recycling opportunities.

Referring to the Michigan Recycling Coalition's awareness campaign, "We want everyone in Michigan to be a part of 'Recycle, MI'—a place where reducing, reusing and recycling is easy and convenient," Rhonda says. "It is really exciting to see our leaders recognize the importance of recycling to our economic recovery and rebuilding efforts. I'm looking forward to what the future holds for recycling in Michigan."



Rhonda Oyer recycles at the Charlotte Area Recycling Authority (above). Communities that don't have recycling available can get "how to" information from the Michigan Recycling Coalition (see box below).

From Garage Sales to Recycling, Reduce Your Waste

ith promises to unclutter our homes and provide great deals for seekers of good used stuff, garage sale signs have popped up all over our neighborhoods. There are treasures to be found here, and thanks to the do-it-yourself, thriftshopping movement, many of them are no longer destined for the trash can.

Giving old things new life by reusing, reselling, remaking or recycling is a terrific way to reduce waste, and an important part of a sustainable future, says Kerrin O'Brien, executive director of the Michigan Recycling Coalition. So, before you unload that old dresser, think about repainting or repurposing it as another type of storage. Further, old cardboard is a good weed barrier under mulch, and a quick internet search offers many new ideas for repurposing almost anything.

Tips for hosting a good garage sale:

■ If your neighborhood has a sale day, take advantage of the free advertising and increased traffic.

■ If you go it alone, signs are very important. Give people enough notice to stop ahead of your driveway.

Price everything to sell, and be willing to deal.

Put out enough stuff that people will be drawn to look at everything.

■ Include your kids—they can sell lemonade, cookies and their old toys.

Be friendly, talk about your stuff. Sell items over \$100 on Craigslist or eBay, and advertise your sale on Craigslist with enticing pictures.

Recycle whatever is left that can't be sold, donated or given away. New materials are added to recycling programs all the time, so call your local government or waste hauler (or visit Earth911.com) to find out what's recyclable in your area. Metal items can be recycled at scrap yards.

If recycling isn't offered yet in your community, call your local government and suggest they join the "Recycle, MI" program.

More On Recycling

• In 2012, over 800,000 tons of industrial by-products were recycled in Michigan, reducing greenhouse gas emissions equivalent to removing over 72,000 cars from the road and saving energy equivalent to about 26,000 households' annual energy needs.

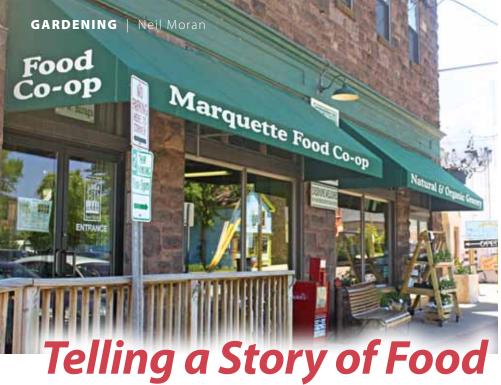
• While Michigan has no landfill ban on electronic waste disposal, individual recycling of this waste went from 1.26 lbs. in 2010 to 2.6 lbs. in 2012. This rate is average for states without a landfill ban.

Resources:

MI Dept. of Environmental Quality: michigan.gov/deq/(click on "Solid Waste" and "Recycling"), 517-284-6591

Michigan Recycling Coalition:

michiganrecycles.org, 517-974-3672 Holds an annual conference & training/ networking events



been spurred partly by Michael Pollen, author

s an avid gardener, "localvore" (one who likes to shop locally), and member of Cloverland Electric Cooperative, I'm interested in the goings-on at the Marquette Food Co-op (MFC). It's a retail outlet for organic food, some of which is grown nearby.

It's also the epitome of the "cooperative" model. It's an organization that, like Cloverland and Michigan's 11 other electric co-ops, is owned by its members. In MFC's case, members pay a one-time fee of \$150, which makes them eligible for discounts and in-store specials.

But selling wholesome food is only part of what the Marquette Food Co-op is about. They also have an exemplary community outreach program that educates people about healthy eating, lifestyles and local agriculture. Through cooking classes, food demos, workshops, farm tours and displays at community events, they connected with about 11,600 people in 2012 alone.

They also have their own "hoophouse," in partnership with Northern Michigan University, where they teach people to garden and experiment with different growing techniques. (A hoophouse is an easy-to-build greenhouse that allows food plants to be grown in the off-season.)

However, the MFC's grocery store is their focal point. It grossed \$5 million last year and is moving from their quaint-butcramped quarters to a much larger store on busy Washington Street.

"There is a national interest in safe food and knowing where it comes from," says Natasha Lantz, community liaison for MFC. This has of "Botany of Desire," and other authors who shed light on problems associated with eating food tainted by chemicals. America's appetite for fast food has also resulted in higher rates of childhood obesity and type 2 diabetes. Fortunately, more people are becoming aware and seeking venues for wholesome, locallyproduced food.

The MFC started in 1971 as a loose-knit group of people making runs to Ann Arbor to get organic food in bulk. Over the years, it morphed into a typical health food store, but struggled and nearly went bankrupt in the mid-90s. By 2000, with management changes and rigorous financial controls, they were talking about expanding their store. In recent years they really tapped into locally-produced products, including fruit, vegetables, meat, honey and maple syrup.

One of their crowning achievements is the U.P. Farm Directory. It lists producers offering everything from eggs to eggplant, and has made these businesses and products much more available to consumers. Many of these farmers now sell their products at the MFC store.

"Many growers came to us," says Abbey Palmer, MFC special projects coordinator and hoophouse supervisor. Growers were also attracted through the outreach program. One of them is Dan Rabine and his wife Mary Kramer-Rabine in Eben Junction, southeast of Munising. The couple grows vegetables in season-extending hoophouses.

"They [MFC] make it possible for smaller growers," Rabine explains. "They'll take smaller quantities and they're very flexible



Above: Shopping at the Marguette Food Co-op. Below: Planting in a hoophouse extends the growing season.



with delivery schedules."

Taking the co-op model to the next stage, MFC's Lantz and Michelle Walk of MSU Extension are helping to form the U.P. Food Exchange. It's an agricultural hub being created with funds MFC received from a Regional Food Systems Grant from the Michigan Department of Agriculture and Rural Development last fall.

The Exchange coordinates movement between the U.P.'s three food hubs (eastern, central and western). The project aims to establish both online and physical sites for farm products, improve local food storage capacity, and educate consumers, farmers and institutional buyers about the Exchange's resources and benefits.

The Marquette Food Co-op is really telling a story about where food is coming from, how it's grown, and by whom, Lantz says. But they're also writing a story by letting their greater community know what healthy eating is all about and how people can "cooperate" in growing wholesome food to feed their families.

> Neil Moran gardens in the U.P. and writes about it at northcountrygardening. blogspot.com.





Sault Schools Save Big on Energy Efficiency

oes energy efficiency add up for schools? Let's do the math. Not only are students and staff more comfortable and focused, but energy efficiency also helps funds go further. For these reasons and more, the Sault Ste. Marie Area Public Schools recently completed multiple large-scale lighting projects as part of their ongoing energy-saving efforts.

"Although we had been doing a great deal to reduce our energy footprint, this not only gave us an opportunity for energy savings, but the support we very much needed," said Larry Perron, on behalf of the Schools' maintenance team.

With the Board of Education's approval and the superintendent's support, the team completed 10 energy efficiency projects at four schools through the

Energy Optimization (EO) Commercial and Industrial program offered by Cloverland Electric Cooperative. Cloverland is one of 12 electricity providers working together to offer rebate programs to Michigan home, farm, and business owners.

Project Details

While there are many EO rebates for businesses, energy efficient lighting projects are the most popular because they tend to have rapid paybacks—annual energy savings often offset equipment and installation costs in less than three years. In addition, the lighting industry is no longer manufacturing T12 fluorescent lightbulbs (as of July 2012), which makes finding replacement bulbs challenging.

These factors, along with EO rebates, motivated the Sault Schools to replace lights in four of its oldest buildings. "We are always looking at ways to improve, such as being green schools, staying up with energy savings, recycling, and water bottle refilling stations to name a few," said Perron. "This was a great opportunity to bring energy reductions to the

forefront."

Another part of the program that appealed to the Schools' maintenance team was

working together with their utility and the EO staff to achieve great results.

"The thing we were impressed with the most is the great people from Cloverland and the energy firm used to supervise the rebate program and assist with new projects," Perron said. "They have been great to work with—very good at helping us work through the rebate program and great sounding boards for new energy savings within our schools." Two elementary schools, one middle school, and one high school in Sault Ste. Marie are on pace to collectively save almost \$12,000 in

Co-op Member Spotlight

Company: Sault Ste. Marie Area Public Schools Energy-Saving Actions:

- ▲ Installed 520 high performance T8 fluorescent light fixtures in two schools.
- Replaced 2,008 standard fluorescent bulbs with reduced-watt fluorescent bulbs in three schools.
- Converted most incandescent light bulbs to CFLs, LEDs, or low-wattage induction lights.
- Replaced outdated lightbulbs at once instead of waiting for old bulbs to burn out.

Rebate Amount: A \$5,809 and counting **Results:**

- Lowered electricity use by 102,000 kilowatthours per year.
- Saving \$11,600 in energy costs per year
- Expecting to double energy savings in 2014

lighting costs each year with just the upgrades that have been made so far. The EO rebates help offset initial purchase costs, too.

Future Plans

The Sault Schools' maintenance team also has big energy-saving plans for the future, such as changing 90 high-bay lights to ultra-efficient light emitting diodes (LEDs), upgrading an additional 375 light fixtures from T12 bulbs to T8s, and replacing the gym lights at both the high school and middle school for an even bigger payback.

Energy savings and rebates for anyone and everyone. 877-296-4319 michigan-energy.org

What To Know As They Go

2011.BGB BG

ongratulations! Your son or daughter graduated from high school! Now, the freshman year of college is on your doorstep, and it's a huge transition for you both. Here's a few tips to help avoid some of the "freshmen woes."

Talk To Your Student

"From my perspective, freshman woes connect with where the student is developmentally in terms of identity, independence, intellectual, intimacy and involvement," says Ellen Thomas, student life director at Hope College in Holland, MI. "Freshmen are thrown into a new situation where they have to establish themselves as individuals within a new community." They are excited to get away from home and begin their new life, but it isn't without some reservations and questions. As a parent, talk with your son/ daughter about their beliefs and values and how they will fit in with their new-found freedom.

Money is another important issue. Help them develop a budget and discuss expectations with regards to academic performance. You may get a roll-of-the-eyes, but touchy subjects like sex, alcohol and drugs warrant discussion too, says Susan Liebau, director of the Wahtera Center for Student Success at Michigan Technological University. "From a student development standpoint, it is important for students to discover and grow on their own." However, it is still important for them to know they have support from home if they need it.

Gaining Independence

Even though you've been preparing your child for the last 18 years for this day, it may still be difficult to let go. You won't be there to make sure they are eating right or getting enough sleep. Will they wake up on time for class? "Instill a sense of trust in your child and empower them to tap into resources on campus," Thomas advises. Handling mundane tasks like laundry, managing money, when to study and what to eat are just some of the daily tasks that will help build and give them a greater sense of confidence and independence. Make sure they know how to do tasks such as laundry and balancing a checkbook. If your child struggles in an area, let him or her know it's okay to ask for help and encourage them to ask someone in their new community.

Frantic Calls Home

Whether it's homesickness or frustration with a roommate, you're likely to be on the receiving end of some rants. Don't take it personally. "Sometimes a student just needs to vent," Thomas says, and calling home feels safe. "First, listen and show some empathy, then ask what steps they have taken to resolve the issue," Thomas suggests. If you are familiar with the college's resources, encourage them to talk to their resident assistant, academic advisor or counseling center. Let them take the reins to solving their own problem. Tell them you have confidence in their ability to resolve the issue. However, if you have grave concern for their health or safety, then make a call to the college.

Academic Pressure

Most students realize college will involve

more study time, but some think the professors will remind them when an assignment is due or be lenient about due dates. Some kids who never struggled academically may fail an exam or assignment. "The freedom is overwhelming for some students who have had very rigid schedules previously," Liebau says. "It sounds silly, but sometimes they have so much time they can't seem to get anything done. Finding ways to learn from a variety of people will only support long-term success." Supplemental instruction or tutoring services are available at most colleges.

Don't Skip Orientation

Orientation activities aren't just entertaining—they are helpful in acclimating to college life and accessing the resources available. For example, Hope College offers an orientation program for parents, students and siblings. Michigan Tech offers a week-long orientation program. Encourage your student to take full advantage of orientation activities. (An orientation tip to parents: Even in this day of texting and emails, students still love a good care package from home.)

You may not hear from your student as much as you would like, but take comfort in knowing that you have prepped them for this time in their life.

Lisa Marie Metzler is a freelance journalist who's written over 200 articles for magazines such as Healthy & Fit, Positive Thinking, and Families First.



Robert Gwizdz | **OUTDOORS**

Pier *Opportunities!*

Photo – Bob Gwizc

here's obviously a lot of fishing to be done off Michigan's shores, and a billion-dollar industry has grown up serving those that do—from boat dealers to charter boat services. But there are plenty of fishing opportunities for those who are bound to the shoreline, too. We're talking about piers.

Piers that allow anglers to enjoy the Great Lakes can be found at the mouth of many of our state's rivers, and there's a good shot at scoring a fresh catch during most months of the year.

Pier fishing in Michigan hits its peak as summer wanes, and Chinook salmon begin moving upriver on their annual spawning runs. By mid-August, there are outstanding opportunities off the northern piers, and by September it's going on statewide. From then until it's too cold to fish, the only thing that changes is the species of fish.

There are as many ways to fish the piers as there are anglers who do it. Some cast spoons or sinking lures from the pier's end. Others rig up a big sinker to hold bait on a hook everything from live alewives to salmon eggs to insect larva—and fish near the bottom. Others prefer chunks of skein spawn and a bobber. All three techniques "produce."

In recent years, I've been fishing the pier at Manistee with some buddies in late summer and early fall. Our best technique is using live alewives, caught with a cast net or on tiny jigs, for bait. We rig-up with a large pyramid sinker and cast into the river, keeping the bait near the bottom. When the fish takes it, drop your rod tip, reel up the slack, slam the hook home, and hold on!

As the season progresses, other trout and salmon species join the procession. Chinooks are joined by Coho salmon, brown trout and steelhead over the course of fall and the steelhead, which are spring spawners, filter upstream throughout the winter and into spring. Techniques change as the species change—steelhead seem much more willing to take salmon eggs or insect larva than the baitfish—but anything you offer is likely to produce at any time.

By October, other Great Lakes denizens show up, especially whitefish. That's what gets guys like Doug Smith, a veteran angler from the Kalamazoo area, fired up.

"From the first of October until ice-up, you can get your limit of whitefish most days," says Smith, who fishes from the pier at St. Joseph. "Right at deer season seems to be the best time and that's when there are fewer guys out there.

"I like to use a single salmon egg that I've boiled so it stays on the hook well, but some guys use wax worms or wigglers. I use a pyramid sinker and about a 3-foot leader and just let it sit on the bottom. And if you miss a fish, just leave it there—those whitefish will circle around and come back and get it."

While Smith is busy with whitefish, anglers elsewhere are looking at other species. The pier at Muskegon, for instance, is noted for producing excellent walleye fishing, often at night, usually around Thanksgiving.

After winter, it doesn't take a lot of spring weather for the action to resume. Fishing for Coho salmon and brown trout—which are near shore then—and steelhead commences as soon as the weather is nice enough to tolerate it. And there are often a few whitefish or their cousins, Menominee, hanging around. As spring progresses, steelhead filter back into the lake from the rivers and from then on, there's plenty of fishing for resident species—smallmouth bass, catfish, burbot, freshwater drum, and more—until, next thing you know, it's late summer and the salmon show up again.

There are piers on all four of Michigan's Great Lakes, from Erie to Superior, and all attract their share of anglers. Some, such as the piers at Ludington or Oscoda, attract regular crowds while others—such as many on Lake Superior—remain undiscovered by many. Pier fishing may not be as adventurous as taking to the big lake in a large boat with a handful of friends, but it can be just as exciting—and generally much less expensive—to enjoy Pure Michigan fishing on Great Lakes waters.

Learn more at piermichigan. org.

Bob Gwizdz is an avid outdoor writer featured in many hunting and fishing publications.



o-Cook Meals

These no-cook meals are quick and easy-no oven or grill required. Save time and energy in the kitchen, with these light and refreshing dishes.

Veggie Hummus Wraps

1 medium whole wheat tortilla 2 T. garlic hummus 2 T. sunflower seeds 1/2 carrot, peeled and sliced thin 1/2 c. spinach leaves 2 T. sliced pepperazzi peppers (sweet and spicy), or roasted red peppers 1/4 of large cucumber, sliced thin 2 T. feta cheese 2 T. Newman's Own[®] olive oil & vinegar dressing Lay out tortilla and spread with hummus and sunflower seeds. Layer with spinach leaves, carrots, red pepper, cucumber and feta

cheese. Roll up and secure with toothpicks. Dip wrap in olive oil and vinegar dressing. This is a quick, healthy meal that can be substituted with many different vegetables. Makes 1 wrap.

Christin McKamey, veggiechick.com

Apple Orchard Pita Pockets Filling:

2 c. deli-roasted chicken breast, diced 2 Gala apples, cored, diced 1/2 c. honey roasted peanuts or beer nuts, finely chopped

1/4 c. jarred real bacon bits 2 c. mixed salad greens, torn 4 ozs. Provolone or Swiss cheese, shredded 4 whole wheat pita bread rounds, cut in half Dressing: 1/2 c. mayonnaise 2 T. apple cider or apple juice 1½ t. honey 1 t. apple cider vinegar 1/2 t. vegetable oil small pinch ground cinnamon small pinch ground cloves salt and pepper to taste To make the dressing, in a small bowl, com-

bine first seven ingredients; whisk until well blended. Season to taste with salt and pepper. Cover and refrigerate 2 hours to chill and blend flavors. In a medium bowl, combine chicken, apples, peanuts and bacon bits.

Stir dressing and pour over chicken mixture; toss to coat. Open pita breads to form pockets. Line each with salad greens. Spoon filling into pockets and top with cheese. Serve red and green grapes or cut-up fresh vegetables on the side.

Marilyn Partington Frame, Traverse City

Photography by: 831 Creative

Veggie Hummus Wraps

'It's a Meal' Salad

Dressing: (prepare a day in advance & chill) 1/2 c. extra virgin olive oil 4 garlic cloves, minced 2 t. dried oregano 2 T. white wine vinegar salt and pepper Salad: garlic cloves 4 c. iceberg lettuce, broken into bits 1 ripe tomato, cut into small wedges 1/2 c. julienned ham, turkey or shrimp 1/2 c. swiss cheese, julienned 1/2 c. fresh grated Italian cheese (parmesan, romano, or asiago) 2 T. Worcestershire sauce juice of one lemon Rub wooden bowl with garlic cloves, then add lettuce, tomato, ham, and cheeses. Drizzle

worcestershire sauce and juice from lemon. Toss salad. Add dressing, toss again and serve with bread or rolls.

Lois Phelps, Stanwood



Christin's Guacamole

3 medium avocados (make sure they are ripe and high quality) 1/4 c. white onion, chopped 2 roma tomatoes, diced 2 T. fresh cilantro, chopped 2 garlic cloves, minced 1/2 -1 t. salt 1/2 t. cumin juice from half a lime juice from half a small lemon

Cut avocados in half. Remove seed. Scoop out avacado from the peel, put in a mixing bowl. Using a fork or masher, mash the avocados (not too much, it should be a little chunky). Add the chopped onion and tomatoes (if not eating right away, put the tomatoes in right before serving). Add cilantro, lime juice, lemon juice, garlic, salt, cumin and mix with a large spoon.

Refrigerate until ready to serve. Makes about 2 cups. Serve with blue tortilla chips.

Notes: ▷ Much of this should be done to taste because of the variability in fresh ingredients. Start with this recipe and adjust to your taste.

▷ To keep the guacomole from turning brown, store in a plastic food container—but before you put the lid on, place some good plastic wrap or wax paper and press down over the surface of the mixture. And be sure to get all of the air out when putting the lid on. This works like a charm!

Christin McKamey, veggiechick.com

Kidney Bean Salad

2 c. or 2 cans kidney beans, drained 1/4 c. celery, diced 3 pickles, dill or sweet, chopped 1 small onion 2 hard-cooked eggs, sliced 1/2 t. salt 1/8 t. pepper 1/2 c. mayo or salad dressing Mix together the beans, celery, pickles and onion. Add eggs, salt, pepper, and mix lightly with mayo or salad dressing. Chill. Serve on

salad greens and garnish with grated cheese. Joan Coyne, Charlevoix

Taco Salad

2 heads romaine lettuce, chopped
1 15-oz. can mexican style chili beans, undrained
2 medium tomatoes, chopped
1 small can black olives, drained and sliced
2 cups shredded cheese
1/2 bag yellow corn chips, crushed
2/3 c. mild salsa or to taste

1 c. Thousand Island dressing, or to taste



Combine chopped lettuce, chili beans, tomatoes, olives and cheese into a large bowl. Top with crushed corn chips, salsa and dressing. Toss well to coat all ingredients and serve. *Lorraine Green, South Boardman*

Ham in a Pita Pocket

10 pita pockets 3 c. diced ham 1 can garbanzo beans, drained and rinsed 1 c. cashew halves 1/8-1/4 c. sesame seeds 1 c. sour cream 1/2 c. mayonnaise 1 T. tarragon vinegar salt and pepper to taste 1 c. cheddar cheese, diced In a large bowl, combine ham with remaining ingredients. Mix well. Chill before serving. Serve in pita pockets.

Paula Brousseau, Bellaire

Fruited Chicken Salad Wraps

 pre-cooked rotisserie chicken
 c. mayonnaise
 small jar maraschino cherries
 small onion, chopped fine
 1/2 c. red grapes, halved
 large red apple, chopped fine
 1/2 c. crushed pineapple
 1/2 c. shredded cheddar cheese (may use chunk cheese cut into very small cubes)
 1/4 c. chopped walnuts tortilla wraps

Remove bones from rotisserie chicken and tear into bite-size pieces. Place in a large bowl. In a medium bowl, combine the mayonnaise and all of the juice from the maraschino cherries (do not use the cherries). Into the bowl of chicken, add onion, grapes, apple, pineapple, and walnuts. Pour the reserved mayonnaise/cherry juice over all and mix well. Allow to chill.

When chicken salad is chilled and right before serving, add the shredded cheese. Wrap the mixture into tortilla wraps and enjoy. Excellent served with cottage cheese and potato chips.

Deborah Buck, Cassopolis



Submit your recipe! Contributors whose recipes we print in 2013 will be entered in a drawing to win a prize: *Country Lines* will pay their January 2014 electric bill (up to \$200)! The 2013 winner will be announced in the January 2014 issue.

Thanks to all who send in recipes! Please send in "Shakes & Smoothies" recipes by Oct. 10 and your favorite "Baked Goods" recipes by Nov. 10.

Mail to: Country Lines Recipes, 2859 W. Jolly Rd., Okemos, MI 48864; or email recipes@ countrylines.com.

Rebates. tax credits available!

Fall is Best Time to Replace Furnace, Central Air

ith winter on the horizon, making sure your furnace is in tip-top shape is smart. But, if your heating equipment is over 15 years old, it's even smarter to replace it.

New Furnace Benefits & Essentials

Not only are older furnaces unreliable, they waste energy. This adds up since heating costs represent 29 percent of your home's annual energy bill—more than any other category. A new energy-efficient furnace offers the same features and functionality as standard models, but uses 16 percent less energy.

Energy "essentials" in a new furnace system include: a variable speed, electronically commutated motor (ECM); proper unit size (not too big or small); tightly sealed ducts; and a programmable thermostat.

Double Up

If you have central air conditioning, do you know that it works hand-in-hand with your furnace? Central air requires a blower motor—usually part of the furnace—to push cool air through your home's ducts.

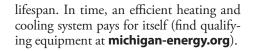
According to ENERGY STAR[®], the only way to ensure that a new air conditioner performs at its rated efficiency is to replace your heating system at the same time. Installing a new central air conditioner

ACTION	REBATE	FEDERAL TAX CREDIT	TOTAL CASH BACK
Retrofit existing furnace	. \$150	\$150	\$300
Buy new furnace (AFUE \geq 95%)	. \$150	\$150	\$300
Buy new central air conditioning unit	. \$100	\$300	\$400
DOUBLE UP: Buy new furnace + central air	. \$350	\$450	\$800
Buy programmable thermostat	\$20	N/A	\$20

without replacing the furnace may lead to premature failure of the system.

Rebates and Tax Credits

Great Lakes Energy has structured its Energy Optimization rebates so they offset installation costs associated with energy-efficient furnaces or air conditioners. The federal government also offers 2013 tax credits for buying efficient heating and/or cooling systems this year. Plus, there is the benefit of ongoing energy savings over the equipment's



How HVAC Rebates Work:

• Work with a local heating and cooling contractor. Ask if they are familiar with Energy Optimization rebates and request help in selecting a qualifying furnace and/ or air conditioner. Need a referral?

or air conditioner. Need a referral? Call 877-296-4319.

Schedule installation before Dec. 31, 2013. Beat winter's bite and complete the project before the end of this year. To claim a tax credit, add Form 5665 to your 2013 federal tax return.

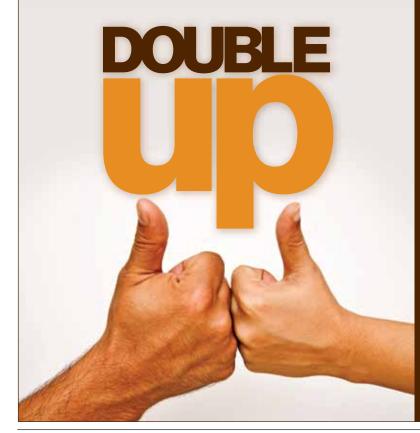
Submit rebate application. Applications are available at **mich**-

igan-energy.org. Your contractor can assist you with documentation and will often submit it on your behalf.

Get rebate. Look for your rebate check in the mail.

Savings for Everyone

Great Lakes Energy rewards businesses, agribusinesses/farms and residents for saving energy. View current incentives at **michigan-energy.org** or call **877-296-4319** for details.



How much can you save?

Why settle for one when you can have two? **Receive a \$150 Energy Optimization rebate** when you install a qualifying energy-efficient furnace. **Or, double up and get \$350** when you purchase an efficient furnace and central air conditioner together. With double deals, now is the time to save!

ENERGY TIP: An energy-efficient furnace with a variable speed motor cuts energy use by 16% per year.

ONLINE: michigan-energy.org





PHONE: 877.296.4319

Energy Optimization programs and incentives are applicable to Michigan service locations only. Other restrictions may apply. For a complete list of participating utilities, visit michigan-energy.org

Electric Water Heating Options

hen selecting the best option for heating your water electrically, please remember that family size, usage habits, installation and operation costs, and other factors need to be considered.

Options include a storage tank or a demand (tankless) unit.

A demand unit is a relatively small device connected to the cold water line close to where hot water will be used. There is no storage tank. Cold water enters the unit and is heated each time the hot water tap is turned on. When you turn off the tap, the unit shuts off, too. It saves energy that otherwise would be needed to keep water heated inside a tank. But is it the right water heater for you?

Enough Hot Water

Although a gas-fired demand water heater has a higher flow rate than an electric one, even the largest gas model sometimes "cannot supply enough hot water for simultaneous, multiple uses in large households," according to the Department of Energy (DOE). Large families would have to invest in more than one demand unit to satisfy their water heating needs.

If a storage water heater is your choice, consider increasing the tank size if switching from gas to electric. Electric water heaters recover slower than gas, so you'll most likely want to go up to the next gallon size so that you don't run out of hot water.

Cost and Comparison

Electric demand water heaters can use up to 28,000 watts, which requires a larger and more expensive circuit breaker, wiring and related equipment to hook it up than a typical 4,500-watt electric storage water heater. Contact your electric cooperative if you plan to install one, because Great Lakes Energy may need to upgrade its equipment, too.

Demand water heaters are also more expensive to buy than storage water heaters, although the DOE adds that lower operating and energy costs could offset the higher purchase price.

Remember that switching from gas to electric or vice versa with storage water heaters will include added hook-up costs for electrical wiring or a gas line.

Other Factors

Make sure the electric service in your home can safely handle the larger additional load with the electric demand model. If not, low voltage or sudden voltage drops are likely to result in dimming or blinking lights and other problems.

If you have hard water, consult with a professional about the pros and cons of a demand water heater versus a conventional storage tank. Great Lakes Energy recommends that members with very hard water consider an electric water heater with low watt-density elements that resist lime buildup.

Remember that you can still reduce energy use with a well-insulated Marathon[®] electric water heater (see ad below). Contact us at 888-485-2537, ext. 8957, for information on a new Marathon and available rebates.

Energy Optimization programs and other rebate offers are also available to help you save energy. Visit michigan-energy.org or call 877-296-4319 for more information.

More information on water heating options can also be found on the DOE's energysavers.gov website.

Sources: Cooperative Research Network with the National Rural Electric Cooperative Association, Department of Energy, and Great Lakes Energy



Five-Year Re-Clearing Program Improves Reliability

ack in 2008, Wolverine Power Cooperative reduced its seven-year right-of-way re-clearing cycle to five years to follow guidelines set by the North American Electric Reliability Corporation (NERC).

Monitoring 211,000 miles of high-voltage transmission lines that serve 334 million people, NERC ensures the reliability of the bulk power system in the continental United States and Canada.

"By the fall of this year, we will have recleared our entire 1,600-mile transmission system over a five-year period," explains Joe Hughes, land management supervisor. "We covered more than 300 miles per year under the new, shorter cycle compared to just over 200 miles annually under our previous sevenyear cycle."

Wolverine employees and contracted crews monitor the health of vegetation on the rightsof-way and remove hazardous and overgrown trees and shrubs. Vegetation hindering the rights-of-way are cut, trimmed or mowed, and herbicides are hand-applied on recently re-cleared lines to control tree regrowth.

New Records Set by Wolverine Members

The distribution member cooperatives of Wolverine Power Cooperative together set a new peak energy demand record in mid-July. Cherryland Electric, Great Lakes Energy, HomeWorks Tri-County Electric, Midwest Energy and Presque Isle Electric & Gas Co-op reached a new record of 661 megawatts on July 17, between the hours of 6 p.m. and 7 p.m. The co-ops' previous peak record of 658 megawatts was set last year in early July.

In addition, the five co-ops set a new energy sales record of 13,321 megawatt hours for the 24-hour period beginning at 1 a.m. on July 16. The previous 24-hour energy sales record of 13,220 megawatt hours was set in July 2012.

"These milestones reflect the continued growth of our members," says Tim Martin, manager of energy operations for Wolverine. "Our job is to meet our members' growing demand with reliable power supply at a competitive price." Overhanging tree canopies on the edges of right-of-way corridors scheduled to be rebuilt are also removed. This process, called side tree-trimming, increases the horizontal tree clearance to the new wires.

"On some sections of our rights-of-way, a tree located outside the cleared corridor may have a crown only 15 feet from the wires," Hughes explains. "We trim horizontally to prevent tree limbs from contacting our lines during high winds or in heavy snow conditions."

The goals of Wolverine's right-of-way re-clearing program are to prevent power outages, provide access for lineworkers if the power is out, and keep the rights-ofway safe for the co-op and neighboring landowners.

"Our commitment to maintaining our rights-of-way keeps the lights on for our members," Hughes says. "Reliability is a top priority."

Wolverine's transmission system delivers electricity to its distribution member cooperatives, including: Cherryland Electric, Great Lakes Energy, HomeWorks Tri-County Electric and Presque Isle Electric & Gas Co-op. Midwest Energy, Wolverine's fifth distribution member cooperative, owns and maintains a distribution system separate from Wolverine's transmission lines.

Landscape for Looks & Efficiency

Wise landscaping can lower utility bills and improve comfort in addition to dressing up your property.

We are landscaping our new house and want a wooded yard for shade and to enhance the energy efficiency of our home. Where should we plant trees, and which are best? What materials are good alternatives to grass for ground cover?

Wise landscaping can do more than create an attractive yard. It can lower your utility bills, summer and winter, and improve your family's comfort year-round. Trees, being one of the key components of any residential landscaping design, can have the greatest affect on your utility bills.

For one, the evaporation of moisture from tree leaves actually cools the air temperature around your home, akin to how perspiration cools your skin. With the proper placement and selection of trees, you can use less electricity to heat your home by taking advantage of passive solar heating during winter,

The primary goal of efficient tree landscaping is to shade your home during summer, yet allow the sun to pass through during winter. Additional goals are, depending on your climate, to allow cool evening breezes to flow around your house or provide moisture for evaporative cooling of the air near it.

Before you start, determine your temperature zone by visiting the USDA Agricultural Research Service at planthardiness.ars.usda.gov/ PHZMWeb/# or checking with a local landscaper. Hardiness zones refer to the minimum winter temperature range. For warm climates in Zone 10, the range is 30 degrees to 40 degrees F. For cold climates in Zone 1, the range is -30 degrees to -40 degrees F. Michigan ranges from Zone 4a to 6b, depending on the area you live in. If you select trees that thrive in a climate more than one or two zones outside your range, they may not do well and require excessive care.

In an average temperate climate, a typical efficient tree landscaping plan has deciduous trees to the south, southeast and southwest. The leaves block the sun during summer, but when the leaves fall, the sun shines through to heat your home. Leave a small gap to the southwest to allow cooler evening breezes to flow through.

Plant dense evergreens along the north, northeast and northwest sides to block cold winter winds. With shorter days and the sun riding lower in the winter sky, not much solar heat comes from these directions.

In hot, humid climates, shading during summer is most important. Taller trees should be planted closer to the home to block the sun, which is higher in the sky. Leaving a gap for breezes is not as important.

There are also alternatives to grass, such as ground cover plants and gravel. Both have advantages and disadvantages for landscaping a house. The benefits of either depend on your climate, house and yard. Even in the same neighborhood, what's good for one house may not be efficient for another.

Low-growing ground cover near your house can help to keep it



A row of hemlocks on the north side of a home block cold winter winds. They do not block the sun because it does not swing that far to the north during winter.



Boulders and ground cover plants that use little water are shaded by trees in the summer and help warm a home during winter.

cool. The leaves block the sun's heat from absorbing into the ground, and they give off moisture for natural cooling. This cooling effect is most effective in drier climates because there is more evaporation. In hot, humid climates, the additional moisture from plants near the house actually increase the relative humidity level. This is more of a problem if you rely on natural ventilation compared to air-conditioning with the windows closed.

A good location for low ground cover is between an asphalt or cement driveway or walkway and the sunny side of your house. The driveway gets hot and holds the heat, and also re-radiates it up to your house.

Send inquiries to James Dulley, *Michigan Country Lines*, 6906 Royalgreen Dr., Cincinnati, OH 45244 or visit dulley.com.

James Dulley is a nationally recognized mechanical engineer writing about home energy issues for the National Rural Electric Cooperaive Association.



Look Up, Look Out to Harvest Safely

hen the crops are ready to be harvested, farmers have only a window of time—between weather, equipment breakdowns, and life events—to bring the best-quality crop out of the field. This flurry of activity to get as much work done as possible also means extra caution should be taken to watch for safety hazards.

Overhead power lines pose one of the biggest hazards. This is partly because we have to look up to see them, so especially *farm operators and workers are urged to:*

- Use a spotter when operating large machinery near power lines.
- Use care when raising augers or the bed of grain trucks around power lines.
- Keep equipment at least 10 feet from lines—at all times, in all directions.
- Inspect farm equipment heights to determine clearance.
- Always remember to lower extensions when moving loads.
- Never attempt to move a power line out of the way or raise it for clearance.
- If a power line is sagging or low, call the local utility immediately.

If contact is made with a power line, it is almost always safest to stay on the equipment. Warn others to stay away, and call the local utility provider immediately. The only reason to exit is if the equipment is on fire. In this case, jump off the equipment with your feet together and without touching the ground and vehicle at the same time. Then, still keeping your feet together, "bunny hop" away. Also consider these additional tips:

- Do not use metal poles when breaking up bridged grain inside and around bins.
- Always hire qualified electricians for any electrical issues.
- ▲ Do not use equipment with frayed cables.
- Make sure outdoor outlets are equipped with a ground fault circuit interrupter (GFCI).
- When operating a portable generator, make sure nothing is plugged into it when turning it on, and never operate a generator in a confined area. Generators can produce toxic, deadly gasses, such as carbon monoxide.
- Always use caution when operating heavy machinery.

Visit SafeElectricity.org for more electrical safety tips.

Two Reelected To GLE Board





Robert Thurow

Richard Walsworth

ncumbents Robert Thurow of Scottville and Richard Walsworth of Mears were recently re-elected to the board of directors for Great Lakes Energy Cooperative.

Five candidates vied for two open board positions. Both are three-year terms. Other candidates were Mary Brower of East Jordan, Michael Hayes and Kara Wasylewski, both of Elmira.

Thurow is a dairy and grain farmer. Walsworth is a retired farmer. Both are long-time members of the cooperative.

Winners were announced at the cooperative's annual business meeting on Aug. 21 in Boyne City.

The election was held by mail-in ballot sent with the July/August issue of *Michigan Country Lines*.

Director Election Results:

Robert Thurow* 2,437
Richard Walsworth* 1,968
Mary Brower 1,689
Michael Hayes 1,543
Kara Wasylewski 932
* winners

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Helping Kids Stay Warm

Boyne Eta Nu members get ready for their annual fall "Dress for the Chill" project that benefits Boyne City Elementary School youngsters in need of warm outdoor clothing. Through their Boyne Eta Nu Charities organization, the women have provided outdoor clothing to an average of 75 children per year since starting the program in 2008. This year's project is funded in part with a \$2,000 People Fund grant. From left are Anne Van-Zandt, Linda Noll, Ann Knutsen, Candy Greene, Nancy Shank, Karen Kimmell, Marilyn Rhadigan, Mary Abdella, and Bedonna Perish.

Did You Know... The People Fund awarded \$146,660 to local organizations in 2012 and has awarded over \$2.34 million since 1999!



Can you give a few cents a month to help your community? The People Fund program works because there is power in numbers. A contribution of less than \$1 each month adds up fast when thousands of Great Lakes Energy members get involved.

The needs of our local communities continue to grow, and you have the power to give the People Fund a bigger role in meeting those needs. We round up your electric bill to the next dollar and the amount, which averaged just 41 cents a month in 2012, goes into the People Fund. There are no administrative costs. All donations are returned to our local communities.

> We Need Your Help! Enroll in the People Fund today 888-485-2537 • gtlakes.com



OUR

ichigan not only has great lakes, we have great islands. Fox, Grand, Bois Blanc, Drummond, Poverty, Shoe and Snake. North Manitou, South Manitou, Whiskey and Waugoshance. Garlic, Gull, Ripley Rock, Partridge, Wood and Naomikong. Neebish, Two Tree, Goat and Memory. Their names roll off your tongue like pebbles skipped across the water. About 400 are named, and hundreds more aren't.

Our islands don't appear in the open hand we use to show the world where we live. We don't have nearly as many as Alaska or Florida, but we're near the top of the list. And of those islands, two are unique in the world. We owe one island to the persistence of journalist Albert Stoll, a conservation columnist for the *Detroit News* who championed its designation as a national park, which was finally achieved in 1940. We owe the other to a simple idea: no cars allowed.

finally got to Isle Royale this summer with my son Jon, who left the heat and bustle of Chicago for the cool nights, starry skies, woodland flowers and rocky trails of one of the nation's most pristine parks. Our leastvisited national park is as far from Detroit about 485 miles as the crow flies-as New York and Des Moines. In the middle of Lake Superior, you can't get there by car, which is what protects it from the harm too many visitors would inflict. Life is precarious on Isle Royale. Fragile flowers cling to rock. Ghostly fir trees wear lichen coats of translucent green. (The lichen appearing to either cause the death of the skinny trees or, at least, to have taken advantage of their frailty.)

Nature's delicate balance is most troublesome for the island's wolves now, as scientists consider whether to import wolves from the mainland to refresh the pack. Without new blood for 18 years—the wolves must cross frozen Lake Superior from Minnesota or Canada—the pack has dwindled to eight members, leaving the moose to multiply to 900 or so. The moose population obviously likes this arrangement. (You'd think 900 moose would be enough incentive for the wolves. Or, just put up a billboard on the Canadian shore of Lake Superior: a picture



Can you find the young woman reading a book on the shore of Isle Royale?

of a moose with an arrow pointing to the island. Wolves are smart, right?) We saw neither animal on our hikes, but heard wolves howling and saw moose droppings.

Wilderness areas, like Isle Royale, give us a chance to recharge, connect with our primal beings, and simplify our lives. Not many of us would choose to live for long without the trappings of modern life, but it's nice to have those places where we can. People of all ages take advantage of the Isle. We met homeschool campers, adventurous young adults, families, and retirees on the trail. One encounter, though, left us puzzled: We met an elderly couple from Alabama who had driven from Huntsville to Houghton, then caught the plane to the island so he could see for himself the little copper mining pits dug by natives centuries ago. After a couple of hours, they flew back. We saw those little copper pits, and though interesting, they alone aren't worth the trip.

When you're on the Isle, you're off the grid. There's little or no cell phone service, spotty internet if you happen by the Isle offices at a good time, and no television. It's like living in rural America before co-ops electrified it. The National Security Agency would have a hard time tracking you there.

ot so on Mackinac Island, we discovered during a recent summer: Japanese teenagers chat in their native language and English, wear flip-flops, shorts and t-shirts with English messages, and take pictures of everything. "Let's get this over with," says one teenager in a group photo. A large Finnish family of all ages tries to agree where to go next. A newly married couple from England drives for 15 hours from Philadelphia to spend the night, because the bride wanted to see the place where the movie "Somewhere in Time" takes place.

You may think Detroit is the international destination in Michigan, but I'd argue that for the summer months that distinction goes to charming Mackinac Island. You can hear every language under the sun there on any given day. Horses and bicycles rule—alongside cell phones. It's hard to pretend you're "somewhere in time" when modern technology keeps bumping into the past on every street and in every restaurant and fudge shop. (I wonder if Kindles now outnumber real paper books in the hands of folks reading on the Island's many porches?)

I hear that you can't stop progress. Though Mackinac Island might be a calmer place without it, progress could ruin Isle Royale. Let's hope that doesn't happen.

(On a positive note, technology can help you keep that Mackinac Island spirit alive all year long. Sign up for Bree's Mackinac Island Blog, bree1972.wordpress.com. It's filled with photos and commentary as the author chronicles Island life. For Isle Royale, watch for the independent movie "Fifty Lakes, One Island" by Chicago filmmaker George Desort, who spent 80 nights on Isle Royale in 2011 traveling alone, by kayak, with his camera. You can see it at the Besse Center Theater in Escanaba on Sept. 12, baycollege. edu/filmseries.)

Mike Buda is editor emeritus of Country Lines. Email him at mike.f.buda@ gmail.com or comment on his columns at countrylines.com/ramblings



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Country Manor Shake in Mustang Brown





*Promotion may not be combined with any other offers. Some restrictions apply. Call for details. Promotion is based on approved credit. Applies to purchases made on American Metal Roofs consumer credit program. \$222.00 monthly payment calculations based on financing \$20,000 at 7.0% APR for 10 years. MI Contractor License #2102158513



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